The Builder.

No. CCCCLIX.

SATURDAY, NOVEMBER 22, 1851.

N Pancras Road, where some time ago Alfred fought the Danes,—whence the place came to be called Battle Bridge, and so continued till an amusing caricature of George IV. in cement turned it into King's Cross,—some enormous constructions are now going on to form the London Station, we will not call it "Terminus," of the Great Northern Railway. This line, as most of our readers know, gives the most direct route to Yorkshire. Hot and costly was the fight for this traffic, but ultimately (in 1846) the directors of the Great Northern obtained their first Act, and have since been gradually strengthening their position and enlarging their scope. Some idea of the contemplated magnitude of the operations on this line may be formed, when we say that the goods station here when completed, will occupy 45 acres of land. From this station the railway passes under the Regent's Canal and Maiden-lane, under Copenhagen Fields, over the Holloway-road, through tunnels at Hornsey and elsewhere, and over an enormous viaduct at Welwyn: this viaduct has 42 arches 30 feet wide and 97 feet high.

The buildings for the passenger traffic at King's Cross, up to this time, have been of a temporary character. They are to the north of the permanent station, beginning where the Regent's Canal passes under Maiden-lane. On the west side of them buildings of great size are being raised for the goods traffic. There is, for example, a shed 600 feet long, by 200 feet wide, terminating with a row of lofty warehouses. Cranes, traps, and turn-tables are formed to facilitate the operations of loading and unloading, and large coal stores and a granary are being built, which have direct connection with the canal.

To obtain a site for the new passenger station, which we illustrate in our present number, the Small-pox Hospital and Fever Hospital were cleared away, together with a large number of houses, mostly of inferior character, including all those on the west side of Maiden-lane, which road has been greatly widened as an approach to the goods station. An iron railing will enclose the buildings, and the small houses on the opposite side of Pancras-road will be removed to open the whole to view. Our engraving* shows the south front next Pancras-road: the two main arches mark the end of the arrival and departure platforms, and have each a span of not less than 71 feet. These are separated by a clock-tower, 120 feet high. The smaller arch, on the right, which is over the cab-drive from the departure platform, has a span of 34 feet. The width of the façade, from the side towers, is 216 feet; the extreme width of the station is 305 feet; the height of these towers, 81 feet. The clock will be 90 feet from the ground, and will have dials 9 feet in diameter.†

Passengers will enter in the centre of the pile of buildings on the left hand (west), extending northwards, and will find themselves in a pay-office 100 feet long, 40 feet wide, and 40 feet high, with a gallery on the east side of it to connect the various apartments on the first-floor on either side, which it would otherwise separate. The first-class waiting-room is at the north end of this office; the second-class at the south; and there are refreshment rooms and all the other accommodations which are now looked for in stations of this importance. The rooms are all large and lofty, but are to be finished very plainly. The waiting-rooms open, of course, into the departure-shed, which is 105 feet in width, and 800 feet long, covered with a semicircular roof 71 feet in height to the crown. The departure-shed is exactly the same size, and is covered in the same way. A wall with arched openings in it to admit of the carriages being shifted from one line to the other separates the sheds. These roofs, which are now in course of construction, consist of semi-circular beams, formed of bent deals, abutting against iron shoes in the buildings on each side and in the central wall, and placed 20 feet apart. These carry purlins 8 feet apart, by means of iron shoes affixed to the sides of the beams. The centre portion, about 3-5ths of the whole, is to be glazed with glass half an inch thick, in 8 feet lengths, 2 feet 6 inches wide, resting on iron bars. The remainder of the roof on either side will be slated. Each beam or rib consists of 16 inch-and-half boards in thickness: each board is fastened to the next with screws, 18 inches apart, and iron bolts pass through the whole at distances, and are secured to an iron band which runs from one end of the beam to the other on the outside.

The brick arches already mentioned as forming the ends of the sheds (the space beneath them being filled in with glass) are formed of paviors: the soffit, which is in four recesses, is 7 feet 6 inches wide. The brickwork throughout, and there is a large quantity of it, very little stone being used, is an exceedingly good specimen. The mortar is compounded of blue lias lime, clay from the foundations burnt and ground, sand, and cinders; in the proportion of 1 lime to 1 sand and 2 burnt clay and cinders: it soon becomes exceedingly hard.

The architect under whose superintendence these works are being carried out is Mr. Lewis Cubitt, and the contractor is Mr. J. Jay, who is also executing the other works to which we have alluded, north of this station, partly under the direction of Mr. Joseph Cubitt, the engineer of the line, and partly under Mr. Lewis Cubitt.

In this new station, it will be seen, great plainness prevails: the architect depends wholly for effect on the largeness of some of the features, the fitness of the structure for its purpose, and a characteristic expression of that purpose.

The City Solicitor, in his plan for improving the City of London now before the corporation,‡ proposes by a branch line to bring the passengers and provisions from this station and from Euston-square and Paddington to a central station in the City. Whether or not Mr. Pearson's be a sound and desirable project we need not now determine: there is much in it that wants explanation, and the cost, notwithstanding what the projector said, would be enormous,—but of this we are certain, that some plan should be adopted to connect the various railways. To speak of a *terminus* to a railway so long as there is any place farther on to be reached, has always seemed to us absurd. If we wish to go from London to Manchester we find no break up of the road at Birmingham or other towns, but can go right on to our journey's end. If, however, when we come back we would travel on, say farther south than London, another sort of conveyance must be taken to, and probably some hours are wasted before the journey can be continued. The first thing to be done towards rendering our railroad system more complete is to bring into communication all the existing lines which surround London.

* See page 730.

† The clock will strike hours, half-hours, and quarters. The principal bell, from an Irish foundry, was at the Great Exhibition, and received a medal: it weighs 29 cwt.

‡ See a communication on this subject, page 742.

ARCHITECTURUS TO HIS SON.

THE LAMP OF DELINEATION.

On the threshold of only the second part of my discourse, I feel constrained to demand that we pause to observe what must make the calling of the architect a subject for any one's wonder. For, among all the complex callings of civilised life, I think there can be none whose professors must combine knowledges so many and so diverse in their nature. I have passed censure upon a considerable portion of our young generation for large pretension and small possession: for the one of these I have hazarded the suggestion of a cause,—and now for the other I think we have a good cause here, and one to which must be allowed great weight as an excuse. And while I think of it, I must say this for the comfort of the offending in general, and, at present, of those of our own class in particular; as there is a reason and a cause for *everything*, so there is for *fault*, whereby even fault is found to be more misfortune than folly. We are pursuing the wrong course, therefore, when, in an attempt to rectify error, we treat it as the culpable folly of its partisans: let us rather search out and operate upon the cause of the mistake, than assail the mistaken.

Certainly in matters generally of men's business there is, compared with the case of the architect, what we may affirm to be universal simplicity: the study is the study of a single theme. It is so with other artists—the painter and sculptor, the musician, the actor, the man of letters,—it is so with the artisan, the tradesman, the manufacturer, the dealer,—with the merchant, the financier,—with the man of science of any sort—the engineer, the mathematician, the naturalist, the antiquary,—with the soldier, the mariner, the agriculturist,—with the physician, the lawyer, the divine. In many instances the requisite knowledge is a matter of severe application and slow experience;—but I think I may say that in almost all the subject is a simple one, a subject of singleness. In the province of the architect, however, we have subjects, not only essentially difficult and experimental, but singularly varied in their character;—the art itself, draughtsmanship, constructive science, building economics, and craftwork; and in late and present practice more,—antiquarianism—dilettanteism the learned, or archæology the romantic and infinite. If all these themes were of anything like one nature or sympathy, I need not say so much; but what can be more widely diverse than the skill of the draughtsman, the skill of the builder, and the skill of the archæologist? In other callings and studies, a man's sympathies may be ever so painfully absorbed, but it is, generally speaking, towards one direction always: the architect, on the other hand, must have sympathies to divide hither and thither in directions widely different and even contrary. Other men's minds breathe a single atmosphere, and diligence and *gusto* will carry them along their one stream with never a weariness; but with the architect, the case is that of a mind distracted almost to impossibility,—thrust into one atmosphere and another which have no-